Buffered Glycerol Saline Base

M204

Intended Use:

With addition of glycerol is used in the collection and transportation of faecal specimens.

Composition**

Ingredients	g / L
Sodium chloride	4.200
Dipotassium hydrogen phosphate	3.100
Potassium dihydrogen phosphate	1.000
Phenol red	0.003
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 8.3 grams in 700 ml purified/distilled water. Add 300 ml of glycerol. Mix well and dispense in screw capped tubes or suitable containers. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Specimens which cant be processed immediately after collection, or those which need to be sent to a distant reference (1,2) laboratory, should be properly preserved to maintain the viability of the specimens. In general, most specimens should be processed in the laboratory within 1 to 2 hours after collection. Buffered Glycerol Saline Base was first reported by Teague and Clurman (3) and later modified by Sachs (4). Buffered Glycerol Saline is used for collection and transportation of faecal specimens (5).

The medium contains sodium chloride, which provides essential ions. Dipotassium and monopotassium phosphate provides buffering to the medium. Phosphate buffers along with glycerol are used to recover pathogenic bacteria. Prepared medium should have a light pink colour indicating slightly alkaline pH. If the medium turns yellow i.e. acidic then it should be discarded because of unfavorable effect on dysentery bacilli if they are present in the specimens (6).

Type of specimen

Clinical samples - faeces

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,7).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Specimen should be processed within 1-2 hours after collection.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance
Light yellow to pink homogeneous free flowing powder
Colour and Clarity of prepared medium
Light pink coloured, clear solution without any precipitate
Reaction
Reaction of aqueous solution (0.83 gms in 70 ml distilled water) at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Cultural characteristics observed with added Glycerol(30 ml), after an incubation at 35-37°C for 18-24 hours.

Organism	Growth
Neisseria meningitidis ATCC 13090	good-luxuriant
Staphylococcus aureus subsp. *aureus* ATCC 25923 (00034*)	good-luxuriant
Staphylococcus epidermidis ATCC 12228 (00036*)	good-luxuriant
Streptococcus pneumoniae ATCC 6303	good-luxuriant
Streptococcus pyogenes ATCC 19615	good-luxuriant

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,7).

Reference

1.Koneman E. W., Allen S. D., Janda W. M., Schreckenberger P. C., Winn W. C. Jr., 1992, Colour Atlas and Textbook of Diagnostic Microbiology, 4th Ed., J. B. Lippinccott Company
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4.Sachs, 1939, J. Roy Arury Med. Corp., 73:235.
5.Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6.Diagnostic Procedures and Reagents, 1963, 4th Ed., American Public Health Association, Inc., New York.
7.Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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HiMedia Laboratories Pvt. Limited,
Plot No.C-40, Road No.21Y,
MIDC, Wagle Industrial Area,
Thane (W) -400604, MS, India

EC REP
CEpartner4U, Esdoornlaan 13,
3951DB Maarn, NL
www.cepartner4u.eu

IVD *In vitro* diagnostic medical device

CE CE Marking

10°C 30°C Storage temperature

Do not use if package is damaged